# VII. PHYSICAL PLANT INVENTORY

#### ROAD AND PARKING SYSTEM

#### **Background information**

The Institute for Transportation Research and Education (ITRE) conducted a road inventory for Jones Lake State Park in March of 1990 and found .72 miles of paved road; 1.83 miles of unpaved road; and 8,738 square yards of paved parking lots.

The entrance road and all the park interior roads were constructed in 1950. The main entrance road, maintenance area road and parking were resurfaced in 1998. The bathhouse parking area was resurfaced in 1993. A survey of the roads, parking areas and utilities was conducted in June of 2004 by construction staff in preparation for this general management plan.

# **Description**

The road system includes the main park road that begins at US 242 and ends at the lake bathhouse. The main entrance road is 18-feet wide with six-foot shoulders. A one-way camping road feeds off the main entrance road and is approximately .3 miles long. The paved road and parking lot have a 3.5-inch course aggregate base and a two-inch asphalt surface. As part of the visitor's center capital improvement project begun in 2004, the park road system is being changed to create a new park entrance that comes off US 242 at the old bathhouse location. The new road will run through the old bathhouse parking lot and tie in with the existing camping and maintenance roads. There currently are approximately 234 parking spaces in the new visitor's center/bathhouse. Corrugated metal pipes at the driveways and low areas provide drainage.

#### **Current Conditions**

The bathhouse parking lot, which had large block cracking in the old pavement due to the sand-clay base, is being completely removed. The new parking lot at the new visitor's center will have a six-inch stone base topped by two inches of I-2 asphalt. The maintenance area parking lot and office parking lot are in good condition. Paved in 1998, the roads are in good condition. Road shoulders are in fair shape; the soil type in the park prevents grass from growing on the road shoulder.

#### **Road Repair Needs and Costs**

- 1. The existing park entrance road needs to be closed to the public and used only as a service entrance for access to the park maintenance area and ranger residence. This will be done after the new visitor's center is constructed and the new park entrance completed. Estimated cost is \$25,000.
- 2. The ranger residence driveway needs to have the roots removed. Following root removal, repaying will be necessary. Estimated cost is \$7,500.

#### **SEWER SYSTEM**

# **Description**

Seven different sewer systems are in the park. All systems have the conventional sewer drain fields with septic tanks. The systems are as follows:

<u>Visitor's Center System</u>- The new visitor's center will use the old bathhouse sewer system that was constructed in 1958. The system has a 5,000-gallon septic tank with approximately ten 75 linear foot drain lines. A 1,000-gallon dosing siphon tank is attached to the septic tank.

New Bathhouse System- A new bathhouse is currently being constructed about 100 feet away from the new visitor's center, and it will have a 3000-gallon septic tank and a 3,000-gallon pump tank. This system will use the existing drain field at the visitor's center.

<u>Campground Sewer System</u>- This system was installed in 1950. It has a 2,000-gallon septic tank with an unknown number of drain lines. The tank has risers and was pumped out in 1998.

Office and Personnel Barracks Sewer System- This system was installed in 1990 as an addition to the barracks/office renovation project. It has a 1,200-gallon septic tank with a 1,200-gallon pump and an unknown number of drain lines. The pump station has a simplex single effluent pump with controls and floats.

<u>Maintenance Shop Sewer System</u>- This system was installed in 1950. It has a 600-gallon septic tank with one drain field line approximately 100 feet long.

Ranger Residence Sewer System- This system, installed in 1998, has a 1,000-gallon septic tank with two 100-foot drain lines.

<u>Superintendent Residence Sewer System</u>- Installed in 1990, this system has a 1,000-gallon septic tank with three 60-foot drain lines.

#### **Current Conditions**

Improvements were made to all of the existing sewer systems in 1998 except for the superintendent's residence system and the office/barracks system. All tanks have been pumped out within the last five years. All systems appear to be functioning adequately at the present time, with no effluent surfacing.

# **Sewer Repair Needs and Costs**

1. The present pump at the office needs to be checked for proper operation, and the alarm system also needs to be checked for proper operation. Costs will be determined after the inspections.

- 2. The park needs to have a licensed sub-surface sewer operator when the new visitor center and bathhouse facility comes on line. Sub-surface school training for a park maintenance person will cost \$1000.
- 3. The campground sewer will need to be replaced if additional sites and electrical sites are added to the camping loops.

#### WATER SYSTEM

The park is supplied water by the Bladen County public water system. The park connected to this system in 1998, and all the park's water lines were replaced using new pvc lines of various sizes. All valves were also replaced. The park's deep water well was capped and disconnected from the county water supply.

The main lines are in excellent shape, and the valves are in good shape but need to be exercised on a routine schedule. The new visitor's center and bathhouse will have new waterlines and valves installed at construction. New water meters are also being installed. No repairs are needed.

# **ELECTRICAL SYSTEM**

The park power is fed underground, supplied by Four County Electric Membership Corporation located in Elizabethtown. All park facilities that use electric power have a pad-mounted transformer located at each building site. The power company owns the underground system and will maintain the underground lines. The system was installed in the late 1990s as part of a water and sewer project and is in good condition. No repairs are needed.

#### **TELEPHONE SYSTEM**

Star Telephone Company provides phone service to the park. A new phone system will be provided at the new visitor's center. There are currently three pay phones located in the park. The telephone system is in good condition, and no repairs are needed.

#### FACILITY INVENTORY AND INSPECTION PROGRAM

Buildings and other structures in state parks are necessary to provide services to park visitors. These structures are essential for protecting public safety, health, and welfare while providing opportunities for outdoor recreation. They include infrastructure, such as roads, parking lots, trails, and systems for potable water, electrical distribution, and sewage treatment. They also include operational and recreational facilities, such as campgrounds, picnic areas, concession buildings, boardwalks, park offices, residences, pump houses, warehouses, barracks, maintenance shops, visitor centers, etc. These facilities must be properly maintained to provide for a safe, continuous, and quality parkuse experience.

# **Jones Lake State Park Building Inventory**

Pictures and descriptions of the structures currently in use at Jones Lake State Park and their repair needs follow.



# Figure VII-1. Old Park Office and Barracks Concrete masonry structure built in 1948. 1803 square feet. Used for park offices and as personnel barracks. Fair condition.



# FigureVII-2. Shop / Maintenance Building

Heated concrete masonry structure built in 1948. 1281 square feet. Used as a workshop and maintenance area. Fair condition. Located in the maintenance area.



#### Figure VII-3. Fuel Storage Tank

The tank is in good condition. Constructed in 2003. The open post and beam shed that used to cover the fuel storage tank has been demolished. Located in the maintenance area.

# Canoe Storage Shed (no picture available)

This 191 square foot post and beam structure, built in 1995, is in good condition. Used for canoe and paddleboat storage, it is located in the maintenance area.



# Figure VII-4. Storage Building & Attached Sheds

The frame shed, built in 1973, is in fair condition. Supplies are stored in the enclosed 552 square feet; attached sheds on the right side and rear are used for equipment storage. More square footage is needed to store equipment. Located in the maintenance area.



#### Figure VII-5. Pump House Storage Building

This 196 square foot unheated concrete masonry structure, previously used as a pump house, now is used for storage. Built in 1973, it is in fair condition. Located in the maintenance area.



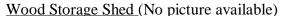
# Figure VII-6. Campground Washhouse

Heated concrete masonry structure built in 1948. 540 square feet. Used as the campground washhouse. Poor condition. Doors, ceiling and interior floor dimensions do not meet the N.C. Building Code and ADA requirements.



# Figure VII-7. Large Picnic Shelter

This 2,093 square foot post and beam picnic shelter was built in 1948. Located near the swim area, it has a fireplace at each end. Fair condition.



Built in 1991, the 190 square foot open post and beam structure is used for wood storage. It is in fair condition. Located in the maintenance area.



# Figure VII-8. Boathouse

The 2,037 square foot boathouse, built in 1948, is in poor condition. The unheated, wood-frame structure is currently being improved as a part of the 2004/2005 visitor's center construction project.



Figure VII-9. Picnic Shelter

Six of these small picnic shelters with concrete slabs were built in 1979. They are post and beam construction and each has 236 square feet. An extended roof provides shelter from the afternoon sun. They are in fair condition.



Figure VII-10. Superintendent's Residence

Built in 1992, the 1,586 square foot, wood-frame residence with an attached carport is in good condition.



FigureVII-11. Visitor's Center

Finished in 2005, the new visitor's center contains staff offices, exhibits, an auditorium, classroom, lobby and restrooms. The new bathhouse/concession building is located on the left behind the visitor's center.

Ranger Residence (No picture available.)

Built in 1964, the 1,253 square foot wood-frame residence is in fair condition.

Ranger Residence Storage Building (No picture available)

Built in 1988, this unheated, 148 square foot wood-frame building is used for storage. It is in fair condition.



Figure VII-12. Renovated Pier and Boathouse Renovations on the pier and boathouse were

completed in 2005.



Figure VII-13. Bathhouse/Concession Building The Bathhouse/Concession Building was completed in 2005.

#### MAJOR CAPITAL IMPROVEMENT PROJECT PRIORITIES

As a part of the general management plan process, proposed capital improvement projects at Jones Lake State Park were carefully reviewed to determine if all projects were still needed and if changes to projects were desirable. In reviewing the proposed capital improvement projects, the general management plan evaluation team considered factors such as changes in environmental regulations, condition of facilities, natural heritage inventory, recreation demand, operational issues and needs, visitor safety considerations, State Parks Act mandates, and trends.

As a result of the general management plan review of the capital improvement projects, one project – *Building Renovations* - was eliminated as a capital project. Park staff have completed some repairs originally included in this project. Remaining building repairs needed - to the workshop, storage building, residences, pump house storage building, and picnic shelters - will be accomplished using major maintenance funds. Two new capital improvement projects were added: *Picnic Shelter* and *Ranger Residence at Bushy Lake*. Project scopes were also revised where necessary.

Each project was then evaluated and ranked using the Division's Project Evaluation Program (PEP), thus creating a revised project priority list of capital improvement projects for Jones Lake State Park, which is shown below. These projects were then combined with projects evaluated and ranked for other state park units, resulting in a priority list of capital improvement projects for the entire state parks system.

#### **Revised Capital Improvement Priorities**

Rank	Project Title	*Score	Cost
1	Trail Improvements	673	\$193,033
2	Campground Improvements	593	647,417
3	Picnic Shelter	588	155,736
4	Personnel Barracks Renovations	560	222,984
5	Warehouse/Equipment Storage Shed	550	352,185
6	Ranger Residence at Bushy Lake	540	<u>278,100</u>

Total: \$1,849,455

\* The score comes from the Division's Project Evaluation Program (PEP). The PEP uses an evaluation formula to rank projects that considers four factors: the objective of the project; the justification or urgency for funding; the estimated annual number of persons (visitors and/or employees) who are affected by the project; and the project's significance, ranging from local to national. The park superintendent, district superintendent, and division management evaluate projects. There are 15 objectives categorizing a project's purpose, and each project can have a primary and secondary objective.

# **Capital Improvement Project Descriptions**

- Trail Improvements: This project will make improvements to approximately 40,000 linear feet of trail, including boardwalks as needed and a spur trail to Salters Lake. Wet soil conditions limit when some of the desired work can be undertaken, and fragile soils also impose limitations on construction. Some existing trail on the western side of Jones Lake that is located on unsuitable soils through bay forest will be retired.
- 2. <u>Campground Improvements</u>: The park now has 20 tent/trailer campsites. The current washhouse does not meet N.C. Building Code or accessibility standards. There are no handicapped campsites nor is there a dump station. The new project will improve ten existing campsites by adding borders, tables, screenings, and grills, including one handicapped site. The ten other sites will be converted to electric sites, and a few new sites will be added to the existing campground area if possible. The existing washhouse will be replaced with a new facility to be located at the same site. A new waterless toilet will be installed at the group camp area. Water and electric lines will be extended as needed to campsites and other areas, and a dump station will be installed to meet health and safety codes.
- 3. <u>Picnic Shelter</u>: Construction of an eight-table picnic shelter will take place in the day use area. Tables and grills will be included. Electricty and water will be extended to the site. No fireplaces will be included. The existing large shelter is the most frequently used facility at the park, and this project will construct a second one somewhat smaller in size.
- 4. <u>Personnel Barracks Renovations</u>: Once the visitor's center construction is completed, the park office will be relocated there. This project will expand the barracks area and renovate to current health and safety standards. The barracks is important to the recruitment and retention of temporary personnel.
- 5. <u>Warehouse/Equipment Storage Shed</u>: This project will extend water and electric lines, convert the pump house storage building to a flammable storage building, extend pavement in the maintenance area and construct a 1,700 square foot equipment storage shed in the existing maintenance area.
- 6. <u>Ranger Residence at Bushy Lake</u>: With additional land purchases at Bushy Lake State Natural Area, ranger presence there is needed. This project will construct a ranger residence and a storage building so that some frequently needed equipment can

be stored on site and not have to be moved back and forth from Jones Lake. It may be preferable to purchase an existing residence with future land acquisition; if so, this project will be dropped.

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